

THE TECHNOLOGY REPORT

ELECTRONIC COMMERCE CORE SERIES

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EbXML: Will it Make a Difference?

By Rik Drummond, Executive Consultant to CommerceNet

Many of us in the electronic commerce area have spent the last three years attempting to incorporate the best of EDI into XML. We've done that because EDI offers very rich business semantics, and XML is easier and cheaper to translate than historic EDI.

Several specific efforts have resulted from this goal. First, the joint CommerceNet-GCA-X12- EDI/XML Working Group effort in 1998, and the resulting X12-TG2 Working Group effort in 1999. This effort attempted to express EDI in XML in a manner that enhanced the historic EDI implementation, yet remained backwardly compatible. Its purpose was to facilitate the adoption of EDI by the small and medium enterprise—the very firms that find EDI too costly to adopt. The efforts were seen as a bridge from historic EDI to electronic commerce.

Additionally, for the last three years, the UN/CEFACT committee in the TMWG have been working to implement the processes, methodologies, and procedures to create the next generation of EDI, which is called Object Oriented EDI. This effort's primary technical focus is on using UML technologies to construct objects that describe the historic business-to-business processes, such as purchasing and shipping. Current modeling tools are used to create standard EDI data structures and process descriptions. Over the last year, it has become apparent to CEFACT that these have a common basis in XML and need many of the same facilities. They both have the same problem which plagues XML at the moment—the lack of a common, pervasive semantic.

In November 1999, CEFACT and OASIS initiated a joint effort, named ebXML, to implement the standards for business-to-business electronic commerce for the world. The effort is focused on creating the necessary components to conduct business over Internet using modeling tools, existing XML, and other Internet technologies.

It appears that this ebXML effort is the only hope in the foreseeable future of establishing a set of business-to-business standards that may solve the most difficult problem in electronic commerce—which is the lack of a common set of semantics that eliminates the need to convert back and forth between cXML, BizTalk, and others. To learn more about the work being done with ebXML, visit the Web site, http://www.ebXML.com.

The eight workgroups in the ebXML effort are.

- <u>ebXML Requirements</u>—develops ebXML requirements for functional, non-functional, and organizational areas.
- Business Process Methodology—drives XML-based business process integration by defining current process requirements and issues cross-industry; sets requirements for information exchange processes that support application-to-application and applicationto-person processes.
- <u>Technical Architecture</u>—defines how components of ebXML effort fit together and how they relate to one another.
- Core Components—focuses on a multilingual, global set of XML semantics developed from the experience of Object design principles and X12 and EDI.



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- <u>Transport/Routing and Packaging</u>—defines the packaging of messages to support the needs of business and act as the transport service for other ebXML envelopments.
- <u>Registry and Repository</u>—defines the architecture and components of a registry and repository for storing XML components.
- <u>Technical Coordination and Support</u>
 ensures that everyone is sharing information and that everything is coordinated; develops test kits and maintains the ebXML site.
- Marketing, Awareness and Education—
 helps to stimulate, inform, and communicate
 to the business community about the
 opportunities, benefits and outcomes of the
 ebXML project.

Klaus-Dieter Naujok, of Harbinger, is the Chair of the ebXML effort, and Robert Sutor, of IBM, is the Vice-Chair. Each group generally has a project manager and a secretary or editor.

It is likely to be the fall of 2000 before standards start showing a direction that are firm enough to start prototyping. The only project that could have the standard in place earlier is the transport/routing and packaging workgroup. The target completion date is May, 2001. Four week-long meetings are scheduled over the next year in the U.S., Japan, and Europe.

More than 150 people from Europe, Asia, and the United States attended the kickoff meeting held in November 1999. In an effort to illustrate the importance of this project, a complete list of attendees to this meeting is included at the end of this report.

Who are UN/CEFACT and OASIS?

<u>UN/CEFACT</u> http://www.unece.org/cefact is the United Nations body whose mandate covers worldwide policy and technical development in the area of trade facilitation and electronic business. Headquartered in Geneva, it has developed and promoted many tools for the facilitation of global business processes, including UN/EDIFACT, the international EDI standard. Its current work program includes such topics as Simpl-EDI and Object Oriented EDI. It strongly supports the development and implementation of open, interoperable, global standards and specifications for electronic business.

OASIS http://www.oasis-open.org is a non-profit, international consortium dedicated solely to product-independent data and content interchange. Focusing on product interoperability, OASIS embraces the complete spectrum of structured information standards including XML, SGML and CGM. OASIS operates XML.org,http://www.XML.org, which is the first global XML industry portal featuring the XML.org Registry and Repository, offering automated public access to XML schemas for electronic commerce, business-to-business transactions, and tools and application interoperability.

November Meeting Attendees

- ACORD
- Air Transport Association
- Amadeus
- Amazon
- Aria
- ASC X12 -Chair, Transportation Subcommittee, Chair X12L Transportation Subcommittee Task Group 1 XML, Chair of the Management and Strategy sub-task group, Chair of X12C/TG2, ANSI X12 Property Insurance Group, Chair XML Task Group, Co-chair of X12C/TG4, Co-chair of X12C/TG3, Co-chair of X12C/TG3, ANSI X12 Property Insurance Group, X12 Chair of CEFACT Forum Task Group, UN/EDIFACT Vice Chair D6 Finance
- Australian Customs Service Technical Advisor, Electronic Commerce Section
- Automotive Industry Action Group
- Bank of America
- Bank of New York
- BASDA Ltd. Chief Executive
- BITS
- The Boeing Company Manager, EC Initiatives for Integrated Digital Environment Program
- Bottomline Technologies, Inc. VP Product Marketing
- British Telecommunications PLC. (BT)
- CEN ISSS -Workshop Manager and Secretariat for EBES, Chairman of CEN/ISSS XML/EDI Workshop and Vice-chair of EEMA
- CMI-CS Director of Advanced Development
- Commerce One Director Advanced Technology, Commerce One - IETF/Internet Open Trading Protocol
- CommerceNet Director e-commerce Knowledge Management and Interoperability, CommerceNet and Co-chair of W3CXML Schema Working Group
- Computing Technology Industry Association (CompTIA)



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- DataChannel Chief Technical Officer
- Data Interchange Standards Association (DISA) -President and CEO
- Drummond Group President and Chair of the IETF Secure EDI workgroup
- Dun & Bradstreet Vice President
- e centreUK Managing Director
- E-Construct
- EAN Executive Secretary, GOST R/TC 355/ Sub Committee 3 "EDI & EANCOM"
- EAN Colombia—Informatic Subdirector, Technical Adviser Senior
- European Board for EDI Standardization (EBES)
- EDIFER
- EEMA (see CEN ISSS)
- Electronic Commerce Code Management Association Technical Director
- Electronic Commerce Europe Executive Director
- eProcessSolutions
- ETS
- Federal Ministry of Finance Germany
- GCA
- GENCOD EAN France
- German Insurance Association
- Granularity Limited Director
- Graphic Communications Association Senior Vice President/IT
- Hong Kong Article Numbering Association
- HL7
- IBM Technologist, Emerging Technologies, Manager of Electronic Commerce Architecture Industry Group, Global Solution Manager, Revenue, Fiscal & Customs Industry Group, Architecture and Development, Industry XML/Java Standards, QSeries Technical Strategist, Chair of Working Group
- IEC
- IEC USNC TC93 (Design Automation) Technical Advisor (Alternate e-mail address)
- IMEDIation Senior Product Manager
- Information and Data Processing Association -Director (also Russian Federation - Ministry of Trade)
- ISO Chair ISO TC 154 WG1
- J.P. Morgan
- KPMG
- Lexica, LLC
- Logistics Management Institute Research Fellow
- MEDIcaLogic.com Information Architect
- Mellon Bank Assistant Vice President
- Meta Data Coalition
- Microsoft BizTalk Technology Evangelist/Program Manager
- MMI-AerolinkEC
- Mortgage Bankers Association of America

- MPA
- New York Clearing House Association
- NIST Computer Scientist and Chair, XML Conformance Subcommittee, OASIS
- Norwegian Centere For MEDIcal Information KITH s
- EDI-Partner
- OASIS Vice Chair, ebXML, President, Chair of Registry & Repository WG
- Object Management Group (OMG) Director of Liaison, Chairman and CEO
- Ontology.Org Chief Technology Officer, eBusiness Europe, Director Ontology.Org and Director of eBusiness Strategy, Computer Sciences Corporation (Europe)
- Open Application Group (OAG)
- PeopleSoft
- Open Buying on the Internet (OBI) Consortium
- Open Trading Protocol (OTP) Consortium
- OpenTravel Alliance (OTA) Board of Directors, Executive Director
- Oracle Corporation Sr. Product Manager, E-Business Program Office, Group Development Manager for E-Commerce Gateways, Director of Business-to-Business Group, E-Business Program Office, Principal Product Manager, Server Technologies
- PriceWaterhouseCoopers Principal Consultant
- Qantas Information Technology
- RosettaNet CEO
- Russian Federation Ministry of Trade Head of Department
- Singapore Article Number Council Executive Director
- State Farm Insurance Companies
- Sterling Commerce (S) Pte. Ltd.
- Sun Microsystems XML Architect, Senior eCommerce Manager
- S.W.I.F.T. Manager, Standards Automation
- Swissair Group
- Taipei Computer Association (TCA) Senior Specialist
- Taipei EDIFACT Committee (TEC) Administrator of TEC
- Telecordia Technologies Standards
 Representative/Common Language Products Business
 Unit
- Tradegate ECA CEO
- TRADEX Technologies, Inc. Architect
- Trinary Systems, Inc. CTO
- UN/CEFACT EWG & TMWG Vice Chair, UN/CEFACT Rapporteur for Asia (TMWG), Chair, EDIFACT Working Group (EWG)
- UN/EDIFACT Administrator, ebXML Chair (TMWG)



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- Chairman, EDIFACT Message Quality Group (EWG)
- Uniform Code Council, Inc. Senior Director, Electronic Commerce Industry Group
- University of Vienna Institute of Applied Computer Science
- VEKTIS BV Coordinator Standardization Vektis and Chairman of EBES EG9
- Visa International
- Workflow Management Coalition Wf-XML -General Management/Secretariat
- XML/EDI
- XMLSolutions VP of EDI, President

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